BEFORE

THE PUBLIC SERVICE COMMISSION

OF SOUTH CAROLINA

DOCKET NO. 2013-275-WS

	In 1	Re: Application of Carolina Water Service, Inc. for Adjustment of Rates and Charges and Modifications to Certain Terms and Conditions for the Provision of Water and Sewer Service RESPONSIVE TESTIMONY PATRICK C. FLYNN PATRICK C. FLYNN
1	Q.	ARE YOU THE SAME PATRICK FLYNN THAT HAS PRE-FILED DIRECT
2		TESTIMONY IN THIS CASE?
3	A.	Yes, I am.
4	Q.	WHAT IS THE PURPOSE OF YOUR RESPONSIVE TESTIMONY IN THIS
5		PROCEEDING?
6	A.	The purpose of my responsive testimony is to respond on behalf of Carolina Water Service,
7		Inc., (CWS) to the comments made by public witnesses at the night hearing held in this
8		docket on December 12, 2013.
9	Q.	CAN YOU RESPOND TO REPRESENTATIVE RALPH NORMAN'S COMMENTS
10		REGARDING THE PROVISION OF WATER SERVICE TO THE CLOVER
11		SCHOOL DISTRICT'S OAKRIDGE MIDDLE SCHOOL?
12	A.	The Clover School District and CWS are in litigation concerning the provision of irrigation
13		water at the Oakridge Middle School, which is located within CWS' service territory in
14		York County and which currently receives water and sewer service from CWS. In June

2012, the Clover School District filed a complaint against CWS alleging that Clover is not obligated to obtain irrigation water from CWS for purposes of irrigating its property containing the Oakridge Middle School. It is CWS' position that a Water and Sewer Services Agreement executed by the two parties in 2008 (see Exhibit PCF-5 Clover School District 2 service agreement 081908) that was approved by the Commission in Docket No. 2008-354-WS, Order No. 2008-770 (Exhibit PCF-3) precludes Clover from obtaining water or sewer service of any type from any party other than CWS with regard to the Oakridge Middle School property. CWS and Clover have entered into good faith negotiations in an effort to resolve their differences.

Q. CAN YOU DESCRIBE DHEC ENFORCEMENT ACTIVITY IN RELATION TO CWS WATER AND SEWER SYSTEMS SINCE 2010?

Yes, "Exhibit PCF-4 CO and NOV Log" lists Consent Orders and Notices of Violation issued by DHEC over the last three years. There were three Consent Orders issued during that time. I will describe each one individually.

Lakewood Estates water system

A Consent Order was executed in July 2011 in the Lakewood Estates water system due to an exceedence of the Maximum Contaminant Level (MCL) for arsenic. The arsenic removal equipment installed at Well #1 failed to consistently remove arsenic present in the source water below the MCL concentration. CWS immediately removed Well #1 from service, and after consulting with the treatment equipment manufacturer, the cause of the elevated arsenic was identified and addressed. The CO was closed on March 26, 2012 with no penalty imposed.

Indian Pines water system

A Consent Order was executed in August 2012 in the Indian Pines water system due to elevated levels of radium present in both Wells 1 and 2. This system is comprised of 17 single family homes. The cause of an increase in the measured amount of radium 226 and radium 228 present in the source waters was undetermined. CWS investigated alternatives and determined the most reliable source of water meeting all drinking water standards was to connect the Indian Pines water distribution system with the City of West Columbia through a metered interconnection. After a lengthy delay in obtaining a water service agreement with the City, CWS completed construction of the interconnection and placed it into service in September 2013. Thereafter, the two wells were abandoned and the CO was closed on September 30, 2013.

Lincolnshire / Whites Creek sewer system

The Lincolnshire and Whites Creek sewer system is located in Georgetown County and is comprised of about 275 single family homes. A Consent Order was executed in April 2012 and an amended CO was executed in September 2013. The CO addressed violations of BOD, fecal coliform, residual chlorine and copper limits identified in the current operating permit. Interim plant improvements completed in September 2012 remedied the plant's performance for the short term. However, the treatment facilities have reached the end of their service life, the plant discharges into a tributary of the Sampit River, an impaired waterway, and the stated goal of the Waccamaw 208 Water Management Plan calls for the elimination of package plants in the region through interconnection with regional treatment providers. In Docket No. 2012-383-WS, Order No. 2012-821, the Commission approved a

bulk sewer agreement with Georgetown County Water & Sewer District, the regional facility for the area. Thereafter, CWS constructed a metered interconnection between the two systems that was recently completed. The new facilities are expected to be placed into service as soon as DHEC authorizes their use, which is expected to occur before January 17, 2014. At that time, CWS will take the Lincolnshire WWTP off line and initiate its decommissioning and demolition. The CO and amended CO will be closed soon thereafter. The amended CO issued in September 2013 addressed the excessive wet weather flow caused by collection system deficiencies. The amendment to the CO requires CWS to perform a collection system audit and to submit a report by January 25, 2014 describing the deficiencies and remedies with a proposed schedule to reduce the excess inflow and infiltration (I/I). As described in Docket 2012-383-WS, CWS implemented a capital project that addressed and corrected all of the deficiencies found. CWS expects DHEC to close the amended CO after receiving and reviewing the audit report.

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Q. PLEASE DESCRIBE THE NOTICES OF VIOLATIONS LISTED ON EXHIBIT PCF-4.

Since October 2010, CWS has received a total of 33 Notices of Violation (NOV's). Of these 33, nine are associated with water systems at Lakewood Estates, Indian Pines, Indian Fork and River Hills. The six NOV's associated with Indian Pines relate to the increase in radium 226 and 228 as described earlier in my testimony. The NOV associated with Lakewood Estates relates to the Consent Order referenced earlier in regard to arsenic concentration. A single NOV was generated in Indian Fork due to the presence of Total Coliform bacteria in January 2012. A single NOV was generated in River Hills, also due

1	to the detection of Total Coliform bacteria, in May 2013. There were no NOV's issued by
2	DHEC for any of the other 17 CWS water systems.
3	A total of 23 NOV's were generated over the last three years in seven sewer systems. Five
4	NOV's are associated with the Lincolnshire WWTP, only one of which has occurred since
5	the interim plant improvements were completed in September 2012. A description of the
6	remaining NOV's is as follows:
7	Friarsgate WWTP
8	A single exceedence of the fecal coliform limit occurred in November 2010. The plant was
9	performing satisfactorily during the sampling event. No cause for the exceedence was
10	found.
11	Glenn Village WWTP
12	An NOV was generated after CWS reported a permit exceedence for fecal coliform in June
13	2011 and an ammonia exceedence in June 2013. A capital project currently under way
14	includes the removal and replacement of the sand filter and chlorine contact tank in the
15	first quarter of 2014, which is designed to improve the reliability and effectiveness of the
16	disinfection process and thus reduce the likelihood of a future exceedence,.
17	I-20 WWTP
18	Four NOV's were generated for fecal coliform exceedences, one in each of the last four
19	calendar years at the I-20 WWTP. CWS has a capital project planned for 2014 that entails
20	pigging the effluent transmission pipe, which is about two miles long, in order to remove
21	a buildup of solids in the pipe that occasionally trigger spikes in chlorine demand and thus

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impair the disinfection process. Another NOV describes the exceedence of the BOD limit

- in April 2013. The line pigging project is likely to reduce BOD in the effluent transmission
- 2 line and thus alleviate future exceedences.

Pocalla Village WWTP

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- 4 A total of five NOV's were issued regarding the Pocalla Village WWTP in Sumter County,
- some of which reflect multiple issues. Three relate to fecal coliform bacteria, one to BOD,
- two to ammonia, and one to clerical reporting errors. Further investigation by CWS and
- 7 DHEC confirmed that no ammonia violation occurred in May and September 2011.

Smallwood Estates WWTP

Three NOV's were issued against the Smallwood WWTP. An NOV in August 2011 identified a failure to address a ground water monitoring well that was found repeatedly to be dry. CWS found the well casing was damaged and replaced the well. Subsequent sampling events have occurred without incident. A fecal coliform violation triggered an NOV in January 2012. An NOV issued in August 2013 reflected a change in bacteriological monitoring upon issuance of a plant permit renewal. In place of the customary fecal coliform bacteria monitoring, the new permit now requires analysis of samples for the presence of E. Coli bacteria. The operator erred in sampling for fecal coliform during the first monitoring period following the issuance of the new permit.

Watergate WWTP

An NOV generated in August 2011 addressed clerical errors in three separate monitoring periods. Further investigation identified that DHEC had misplaced the DMR's in their files. In July 2013, the effluent sample failed the chronic toxicity test. However, the plant was performing normally at the time. No cause was found for the violation. No violations

- occurred during this time period at either the Roosevelt Gardens or Oakland Plantation
- 2 WWTP's or in the seven satellite collection systems.
- In summary, none of the NOV's impacted the delivery of water or sewer service to
- 4 customers. In some locations, CWS is investing capital or is scheduled to make
- 5 improvements in 2014 to alleviate the generation of exceedences in the future.

6 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

7 **A.** Yes it does.